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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,418	10/21/2005	Amie Smirthwaite	78104085/N16680	3078
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Intellectual Property Dept. Dewitt Ross & Stevens SC 2 East Mifflin Street Suite 600 Madison, WI 53703-2865				
EXAMINER				
SCHILLINGER, ANN M				
ART UNIT		PAPER NUMBER		
3774				
NOTIFICATION DATE		DELIVERY MODE		
10/05/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

doctet-ip@dewittross.com

Office Action Summary

Application No.

10/526,418

Applicant(s)

SMIRTHWAITE ET AL.

Examiner

ANN SCHILLINGER

Art Unit

3774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2009.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 21-30 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-12 and 21-30 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date 7/30/2009
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4-7, 9, 11, 21, 23, 24, and 27-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Song (US Pat. No. 5,330,500). Song discloses the following of claim 1: a stem graft for implantation in a body lumen comprising a tubular graft (2) having a first stent section (42, 44) comprising reinforcing material (col. 3, lines 40-42) formed into a first pattern (see Figures 6-8) and a second stent section (20) comprising reinforcing material (col. 2, lines 67-68) formed into a second pattern (see Figures 6-8), the first pattern being different from the second pattern, wherein the reinforcing material of the first pattern is disposed on the tubular graft in a pattern which osculates about a line which is parallel to the longitudinal axis of the tubular graft (see Figure 6), and wherein the reinforcing material of the second pattern includes separate spaced circumferential hoops extending circumferentially around the longitudinal axis of the tubular graft (see Figure 6), the tubular graft having a first diameter in the region of the first stent section and a second diameter in the region of the first stem section, wherein the first diameter is different from the second diameter (col. 5, lines 34-35).

Alternatively, Song may interpreted to disclose claim 1 where the first stent section is element 20, where element 11 form an oscillating pattern about an arbitrary line parallel to the device's longitudinal axis. The second stent section would then be elements 42 and 44. Their

entire circumferential structure forms hoops that extend circumferentially around the device's longitudinal axis. Please again see Figures 6-8, and the text citations provided above.

Song discloses the limitations of claim 4 as shown in Figures 6-8, where the first diameter is interpreted to be associated with elements 42, 44.

Song discloses the limitations of claim 5 as shown in Figures 6-8, where the second diameter is interpreted to be associated with elements 42, 44.

Song discloses the limitations of claims 6, 7, and 9 as shown in Figure 6.

Song discloses the following of claim 11: a method comprising: a radially compressing a stent graft having (col. 3, lines 49-53): (1) a first stent section (42, 44) having a first diameter (see Figures 6-8), and including reinforcing material formed into a first pattern (col. 3, lines 40-42), the first pattern including a continuous length of reinforcing material which is disposed around the first stent section in a pattern which oscillates about a line which is parallel to the longitudinal axis of the first stent section (see Figure 6), and (2) a second stent section (20) having a second diameter (see Figures 6-8) and including reinforcing material formed into a second pattern (col. 2, lines 67-68), the second pattern including at least one circumferential hoop of reinforcing material which oscillates about a line running circumferentially around the longitudinal axis of the second stent section (see Figure 6), and wherein the first stent section does not include reinforcing material formed into the second pattern, and the second stent section does not include reinforcing material formed into the first pattern (col. 5, lines 35-38); b. inserting the compressed stent graft into a catheter having an internal diameter which is less than the diameter of the first stent section of the stent graft (col. 5, lines 51 through col. 6, line 3).

Song discloses the following of claim 21: a stent graft (2) for implantation in a body lumen comprising a tubular graft having a first stent section (42, 44) including reinforcing material (col. 3, lines 40-42) formed into a first pattern (see Figures 6-8) and a second stent section (20) including reinforcing material (col. 2, lines 67-68) formed into a second pattern (see Figures 6-8), wherein the first pattern includes a continuous length of reinforcing material which is disposed around the tubular graft in a pattern which oscillates about a line which is parallel to the longitudinal axis of the tubular graft (see Figure 6), and wherein the second pattern includes at least one circumferential hoop of reinforcing material which oscillates about a line running circumferentially around the longitudinal axis of the tubular graft (see Figure 6), and wherein the first stent section does not include reinforcing material formed into the second pattern, and the second stent section does not include reinforcing material formed into the first pattern (col. 5, lines 35-38).

Alternatively, Song may interpreted to disclose claim 21 where the first stent section is element 20, where element 11 form an oscillating pattern about an arbitrary line parallel to the device's longitudinal axis. The second stent section would then be elements 42 and 44. Their entire circumferential structure forms hoops that extend circumferentially around the device's longitudinal axis. Please again see Figures 6-8, and the text citations provided above.

Song discloses the limitations of claims 23 and 29 as shown in Figure 6.

Song discloses the limitations of claim 24 in col. 5, lines 34-35 and as shown in Figures 6-8.

Song discloses the limitations of claim 27 as shown in Figures 6-8, where the first diameter is interpreted to be associated with elements 42, 44.

Song discloses the limitations of claim 28 as shown in Figures 6-8, where the second diameter is interpreted to be associated with elements 42, 44.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 3, 10, 12, 25, 26, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Song in view of Datta et al. (US Pat. No. 6,338,739). Song discloses the invention substantially as claimed including spacer sections on the stent (32, 34), however, Song does not teach the different lengths and diameters of the stent as claimed by the Applicant. Datta et al. teaches in col. 7, line 61 through col. 8, line 37 a stent where the length and diameter dimensions are dependent on different factors including the anatomy of the patient and the type of surgical procedure being employed. Therefore, the diameters and lengths may be altered to properly fit the patient. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Song by altering the diameters and lengths to properly fit the patient. 1, 4-7, 9, 11, 21, 23, 24, and 27-29

Claims 8 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Song in view of Wu et al. (US Pat. No. 6,254,632). Song discloses the invention substantially as claimed, however, Song does not teach the specific dimensions of the struts as claimed by the Applicant. Wu et al. teaches in col. 4, lines 27-42 and col. 6, lines 1-12, a stent where the strut dimensions and device diameter depend on the patient's anatomy and the device's intended

application. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Song by changing the struts' dimensions to properly fit the patient.

Response to Arguments

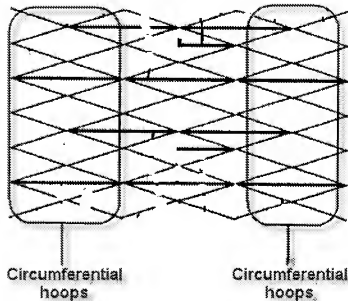
Applicant's arguments filed 5/21/2009 have been fully considered but they are not persuasive. The Applicant contends that elements 42 and 44 of the Song reference may not be considered to be the "first stent section" of the claimed invention. The examiner respectfully disagrees. The term "section" is being interpreted according to the following definition: "a distinct part or subdivision of anything" (section. Dictionary.com. *Dictionary.com Unabridged* (v 1.1). Random House, Inc. <http://dictionary.reference.com/browse/section> (accessed: September 29, 2009)). The claim language does not specify the locations of the first and the second sections, and the transitional phrase "comprising" is open-ended and thus allows there to be more elements than those claimed. Therefore, it would be reasonable to include both sections 42 and 44 as a particular stent section. In addition, to address the Applicant's concerns about the section being spaced apart, either element 42 or 44 alone may be used to meet the claims' limitations. Both elements were included for the sake of completeness.

The Applicant further contends that elements 42 and 44 do not oscillate about a line which is parallel to the longitudinal axis of the tubular graft. The examiner respectfully disagrees. Elements 42 and 44 would oscillate about lines that pass through the stent graft vertically, in a similar manner as the oscillations shown in Figure 2 of the current application.

The Applicant also states that the second section 20 does not have separate, spaced circumferential hoops extending circumferentially around the longitudinal axis of the tubular

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graft. The examiner respectfully disagrees. Please see the figure below for clarification as to how the prior art is being interpreted.



Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANN SCHILLINGER whose telephone number is (571)272-6652. The examiner can normally be reached on Mon. thru Fri. 9 a.m. to 4 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Isabella can be reached on (571) 272-4749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. S./
Examiner, Art Unit 3774

/DAVID ISABELLA/
Supervisory Patent Examiner, Art Unit 3774